

ABSTRACT OF THE DISCLOSURE

First, an first insulating film is formed along surfaces of a plurality of combinations of an gate electrode and an gate insulating films, and a semiconductor substrate, respectively. Then, on the first insulating film,
5 an second insulating film different from the first insulating film is formed. The steps of forming the first insulating film and forming the second insulating film are alternately repeated until a concave formed by the surface of an later insulating film, which is a film formed later out of the first insulating film and the second insulating film, is positioned above the
10 upper surface of the gate electrode. Thereafter, an third insulating film is formed on the later insulating film. Thus, a semiconductor device with high reliability can be obtained by improving a state of the insulating film formed between the gate electrodes.